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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,917	10/29/2003	Wallace T. Van Winkle	H0005096	8221

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EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

1. This Office action is in response to Applicant's amendment filed June 08, 06. Claims 1-3, 12, and 13 have been amended. Claims 6, and 17-20 have been canceled.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1-5, 7, 8, and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaprelian (US Patent No. 4,857,895) in view of Kadwell et al. (US Patent No. 6,326,897).

Claim 1:

Kaprelian discloses a method for reducing false detects, comprising:

- a. emitting an infrared light beam from a primary emitter 24 to a primary monitor detector 26;
- b. detecting a portion of the first infrared light beam (fig. 4);
- c. measuring a first voltage value using a primary receive detector 26;
- d. detecting a portion of the second infrared light beam with a secondary receive detector 28;
- e. measuring the second voltage value.

Kaprelian also fails to disclose setting primary and secondary alarm flag alarm. However, it would have been obvious to one skilled in the art, as technology advances, to use controller and a computer program to provide an alarm status as taught in Kadwell. One skilled in the art would have readily setting an alarm flag when smoke is detected from each detection provided by the detectors and provide an alarm when both detectors detect the alarm condition, that is, when the detection is confirmed by redundant detection.

Claim 2:

The secondary receive detector is directed at a line interconnecting the secondary emitter and the secondary monitor detector.

Claims 4-5:

The system in Kaprelian and Kadwell's determines a calibration level for the primary and secondary channels represent a scatter count of the air. The percent of smoke value of the air only present a choice in design. A skilled artisan would have readily known which percent value would be proper for the indication that an alarm situation exists.

Claims 7 and 8:

One skilled in the art would have readily recognized that, in the combined system of Kaprelian and Kadwell, the alarm situation should not be indicated if the redundant detector does not detect smoke and would disable the alarm flag.

Claim 11:

Kaprelian fails to disclose that first threshold value and the second threshold value is equal. Nonetheless, it would have been obvious to one skilled in the art that these values should be equal since they are detecting the same amount of smoke.

Claim 12:

Kaprelian discloses a method for using a smoke detection system comprising:

- a. transmitting light from a first emitter 44 to a first monitor detector;
- b. receiving a first portion of the light using a first receive detector 26;
- c. determining a primary voltage by measuring the portion of the light received from the first receive detector 28 and if the primary voltage is greater than a primary threshold value;
- d. receiving a second portion of the light using a second receive detector 28, the second portion of the light having been scattered by the smoke, the secondary receive detector is directed at a line interconnecting the secondary emitter and the secondary monitor detector;
- e. determining a secondary voltage by measuring the second portion of the light received from the first receive detector 28 and if the primary voltage is greater than a primary threshold value.

Kaprelian fails to disclose setting primary and secondary alarm flag alarm. However, it would have been obvious to one skilled in the art, as technology advances, to use controller and a computer program to provide an alarm status as taught in Kadwell. One skilled in the art would have readily setting an alarm flag when smoke is detected from each detection provided by the detectors and provide an alarm when both detectors detect the alarm condition, that is, when the detection is confirmed by redundant detection.

Claim 13:

In the Kaprelian system, light is transmitted from a second emitter 24 to a second monitor detector.

Claims 14-15:

The percent of smoke value of the air only present a choice in design. A skilled artisan would have readily known which percent value would be proper for the indication that an alarm situation exists.

4. Claims 9-10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaprelian (US Patent No. 4,857,895) in view of Kadwell et al. (US Patent No. 6,326,897) and further in view of Solomon (US Patent No. 4,401,478).

Claims 9 and 16:

Neither Kaprelian nor Kadwell discloses a supervisory circuit. However, Solomon teaches a supervisory circuit used for providing a maintenance fault signal. It would have been obvious to one skilled in the art to apply this concept in the combined system of Kaprelian and Kadwell system because it is conventional and desirable.

Claim 10:

It is inherent that since one channel in the modified system of Kaprelian and Kadwell fails, the other one functions as a primary detector channel.

Applicant's Arguments

5. The Applicant has presented the following arguments:

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The Applicant has argued that Kaprelian and Kadwell make no mention of a second receive detector.

Response to Applicant's Arguments

6. Applicant's arguments have been fully considered but they are not persuasive.

It is submitted that the second photodiode 28 is the second receive detector as stated in the rejection. Kadwell has been used to show the application of a computer processing device to set smoke alarm flags. Therefore, the Applicant's arguments are not considered persuasive.

For the above reasons, the rejection is maintained.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Julie Lieu", with a long, sweeping diagonal line extending from the end of the signature towards the upper right corner of the page.

Julie Lieu
Primary Examiner
Art Unit 2612

Aug. 10, 06